

tank in place in this station. In that case, the secondary tanks may be filled in masked time in the temporary storage station.

The invention also relates to a method which may be carried out with the device described hereinabove, and more specifically to a method which

5 comprises the steps consisting in:

- conducting at least one principal tank containing a coating product up to the vicinity of at least one secondary tank intended for an atomizer;
- transferring coating product from the principal tank towards the secondary tank, and

10 - supplying the atomizer with coating products from the secondary tank.

According to a first advantageous embodiment of the invention, the method comprises more particularly the steps consisting in:

- conducting the principal tank up to in the zone of activity of a robot for positioning the atomizer and a secondary tank intended for that atomizer;

15 - displacing the secondary tank by means of the robot up to the immediate vicinity of the principal tank before transferring the product from the principal tank towards the secondary tank, and

- after the transfer, displacing the secondary tank towards a position in which the atomizer is able to coat the afore-mentioned objects.

20 According to another advantageous embodiment of the invention, the method comprises the steps consisting in:

- conducting the principal tank up to the vicinity of a station for temporary storage of at least one secondary tank;

25 - transferring product from the principal tank towards at least one secondary tank in place in the station, and

- mounting at least one secondary tank filled from said principal tank on a

paint-applying robot.

In that case, each secondary tank may be provided to form a sub-assembly with an atomizer for which it is intended and such a sub-assembly is provided to be mounted on the robot after filling of the secondary tank in the temporary
5 storage unit.

Whatever the embodiment envisaged, the method advantageously consists in filling the principal tank with a sufficient quantity to coat the same object or one side of the same object by different atomizers and in supplying the atomizers by means of secondary tanks filled by transfer from this principal
10 tank.

Finally, the invention relates to an installation for spraying coating products, comprising a device as described hereinabove, possibly employed with the method as described hereinbefore. The cost price of such an installation is substantially less than the known installations having to be
15 supplied with circulating and it is much simpler to use than an installation supplied solely with cartridges each intended for an atomizer.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be more readily understood on reading the following description of two embodiments of an installation in accordance with its
20 principle, given solely by way of example and made with reference to the accompanying drawings, in which:

Figure 1 schematically shows a plan view of an installation according to a first embodiment of the invention, the atomizers all being in the course of application.

Figure 2 is a partial section, on a larger scale and along line II-II of Figure 1, of part of the installation of Figure 1 in the course of cleaning/filling of a tank

of a robot thereof.

Figure 3 is a view similar to Figure 1 for an installation according to a second embodiment of the invention, and

Figure 4 is a section along line IV-IV of Figure 3.

DESCRIPTION OF PREFERRED EMBODIMENTS

Referring now to the drawings, the installation shown in Figure 1 is provided for coating automobile vehicle bodies 1 with liquid paint, said bodies being displaced by a conveyor 2 in a substantially rectilinear direction X-X'.

The bodies 1 are each supported by a carriage or toboggan 3 driven by the conveyor 2.

Multi-axis robots 10 to 17 are distributed on either side of the conveyor 2 and toboggans 3, and are each equipped with an atomizer 20 to 27 and a tank 30 to 37 associated therewith. The tanks 30 to 37 are permanently mounted in the vicinity of the wrist of each robot. The capacity of each tank 30 to 37 is sufficient to allow the desired application of coating products on a body 1.

The robots 10 to 13 may be provided to be intended for the application of a first coating layer inside a body, while the robots 14 to 17 are intended for the application of a second layer inside the bodies. According to a variant of the invention (not shown), the installation may also comprise other robots intended respectively for the application of a first layer and a second layer outside the body, a station for manual retouching possibly being provided in the downstream part of the booth of the installation.

After a body has been coated, each tank 30 to 37 must be cleaned and filled with a fresh coating product, most often different from that used previously, as the automobile vehicles are painted as a function of the customers' orders.